profundam impressam convexis divaricatis, deinde plane declivibus, ultimo medio subimpresso sicuti in V. sadleri, *infra subangulato; apertura ovali, cærulescente, margine acuto: operculo concavo, castaneo.*

Obs. Through Dr. Kirk, from Lake Nyassa. I have named it as a mark of respect to the author of the newest publication concerning British conchology. I do not know any recent species of *Paludina* with which it could be parallelized.

6. Vivipara capillata. *Testa conica, tenui, ampliter umbilicata, olivacea, parum nitente; anfractibus quinque et dimidio, supra obliquis, angulariter subplane declivibus, sutura parum impressa, anfractu ultimo infra geniculato, costis seriebus tribus intermediis paribus intervallis distantibus pilis brevissimis ornatis; apertura mediocri, orbiculari, intus albescente, margine acuto, nigro.*

Obs. Through Dr. Kirk, from Lake Nyassa.

7. Vivipara robertsoni. *Testa acuta, conica, solidiuscula, umbilico amplo, callo circumducto, olivacea vel eburnea; anfractibus sex, supra modice convexis, obliquis, sutura haud impressa, anfractu ultimo infra geniculato; apertura magna, rotundo-ovali, intus albescente, plerumque maculis dilutis fuscis picta, margine acuto, præcipue ad labium internum nigro.*

Obs. Through Dr. Kirk, from Lake Nyassa. I have given to this species the name of Mr. David Robertson of Glasgow, in acknowledgment of the very effectual assistance which he was pleased to lend me in my deep-sea dredging-operations at Great Cumbray.

6. On a Leech (Trocheta subviridis, Dutroch.) found in the Viscera of a Moluccan Deer (Cervus moluccensis, Müller). By James Murie, M.D., Prosector to the Zoological Society.

In the month of July of this year, while a post mortem examination was being made of a Moluccan Deer at the Society's Gardens, there was found among the viscera a Leech of such dimensions as to excite the astonishment of the various parties present at the operation. Unfortunately the viscera were somewhat disturbed and confused when the Leech was first observed, so that it might be rash to say whether it was attached to the stomach, the intestines, or to the organs of the chest.

At the time this specimen of Leech was obtained I myself was out of town; but as to the credibility of those present I need only mention Mr. A. D. Bartlett's name as an authoritative witness, to allay suspicion of error or deception.

When first shown me I was surprised at its large dimensions, but for the moment was inclined to believe it an unusually large specimen of the Horse-leech (*Hæmopis sanguisuga*, Sav.), which might have

been accidentally swallowed by the Deer while drinking water. My attention was further called more fully to ascertain its specific identity by its recalling to my mind a notice of a large Leech found in the neighbourhood of the Regent's Park by Mr. Hoffmann, and described by Dr. Gray as being entirely new to the British fauna (see Proc. Zool. Soc. 1850, p. 52).

With the assistance of Dr. Baird at the British Museum, I was enabled by comparison to ascertain that this Leech which had been found in the Deer was no other than the species commented on by Dr. Gray, namely the *Trocheta subviridis* (Dutroch.) referred to by Lamarck in An. sans Vert. vol. v. 2nd edit. p. 523, and also described and figured by De Blainville in the Dict. de Scien. Nat. xlvii. 246, lviii. 559, Atlas pl. *Hirud.* fig. 6. Besides, in the monograph of the family by M. Moquin-Tandon (p. 309, pl. 4), there is a detailed account and excellent figures of the external appearance and internal anatomy of this species of Leech, where 8 to 12 or 13 centimètres is given as the size it occasionally reaches, and it is said not to be terrestrial, as the author kept one fifteen days in water in good health.

The specimen first found by Mr. Hoffmann near or in the Regent's Park now forms part of the National Collection, and is referred to in the 'Catalogue of British Non-parasitical Worms,' 1865, p. 45. It is there stated to have been 7 inches long when in the fresh condition, and now, after being preserved in spirits, as much as 6 inches in length with a breadth of half an inch.

The distinctive features of *Trocheta subviridis* are its great size, its large shield-like sucker, the uniformity and narrowness of the rings, and the tail-sucker being upon the ventral aspect—with all of which our present specimen agrees. It also differs from *Hirudo medicinalis* and *Hæmopis sanguisuga* in the form of its jaws, and in having but eight eyes, whereas these have ten. The eyes I could not detect; but, according to M. Tandon, they are occasionally absent or with difficulty made out.

Obtaining this second specimen of a large and rare Leech in the same vicinity as the last, it might be looked upon as conclusive that it was an animal indigenous to Britain, as Dr. Gray has surmised, had I not other facts to detract from this supposition.

It may either be said that the specimen obtained from the Deer found its way thither by being swallowed among the food or water, as the animal partook of these in the Gardens; and this fact would strengthen the belief of its British habitat; or, in opposition to this, it may be suggested that the ova, or Leech while young, may have been taken into the viscera of the Deer in its own native country previously to being shipped for England.

Dr. Baird holds that this last opinion is not tenable, upon the grounds that in a voyage of several months it would be sure to die itself or pass through the Deer. But in contradiction to his judgment, Mr. Bartlett relates to me the case of a similar large Leech having been obtained from a Yak (*Bos grunniens*, Linn.) on board ship, and before the animal had set foot on these shores. This oc-

curred in a female Yak that afterwards formed part of the Collection at Knowsley of the late Earl of Derby. The man in charge of the Yak, and who brought it to England, told Mr. Bartlett that for several weeks in the first part of the voyage the animal seemed to lose flesh fast, and altogether have the appearance of a wasting and decline. One afternoon while watching it, he was surprised to see a large Leech descend one of the nostrils and, curling itself round, proceed to ascend the other, when he seized it and withdrew it from the Yak's nose. He brought the Leech with him to England, and showed it to Mr. Bartlett, who supposes it to have been not much less than 9 inches long; but, not suspecting it to be an animal of special interest, he did not preserve the specimen. After the Leech had been abstracted from the Yak's nose, the latter animal seemed to thrive well, and it was afterwards landed in England in excellent condition.

Since then, namely in June last, and soon after three Yaks had arrived at the Society's Gardens belonging to Mr. Stone, there was found in the water-trough where the newly imported Yaks drank, another large Leech, the same which I now exhibit, and which appears also to be a specimen of *Trocheta subviridis*. Mr. Bartlett immediately suspected this must have come from one of the new animals; and his thoughts were so far verified, that Mr. Stone informed him that Leeches of a similar character had been discharged or obtained from the Yaks during the voyage.

Although from what I have said it cannot be affirmed with certainty that this Leech *does not* belong to the British fauna, yet, with this somewhat contradictory testimony before us, it may be as well to suspend judgment until at least more accurate evidence is given, whether it has not thus casually been imported to these islands.

My own belief, from the statements made, inclines me to the idea of its importation by the medium of some large animal—especially as I myself on one occasion took several small Leeches from the posterior nares of a large Hippopotamus killed by our party in the river Aye, an upper tributary of the White Nile—and also as several authorities have mentioned the occasional occurrence of Leeches in the nasal passages of other large animals.

Apart from the decision of this point, it still remains undecided whether *Trocheta subviridis* is to be regarded as belonging to Britain, or whether it has an Asiatic habitat*. M. Moquin-Tandon, p. 309, records it as being found in several places in France, as the district of the Loire, Toulouse, Dordogne, &c., also in the environs of Algiers, but he does not mention its geographical distribution to the East Indies.

Respecting the name of this genus, in an article in the October number of the 'Natural History Review,' 1865, reviewing Dr. John-

* In the discussion following the reading of this paper, Dr. Sclater stated that the Moluccan Deer had not been imported direct from the East, but had been received from the Zoological Society of Amsterdam. If so, it more readily accounts for this Continental species of Leech being now found in England, and, moreover, adds to the probability of a similar Eastern importation.

son's 'Catalogue of Worms in the British Museum,' already referred to, fault is found that *Trocheta* is given therein as the generic term, whereas the writer considers that *Trochetia* is proper. But the critic himself is in reality at fault, as I find that Dutrochet named the genus *Trocheta* in his paper, Bull. Phil. 1817, while Lamarck a year later alters this to *Trochetia*, An. sans Vert. 1818.

7. Sur l'Habitat du Hyalonema lusitanicum. Par J. V. Barboza du Bocage, F. M. Z. S.

A l'époque ou j'annonçais la découverte dans nos mers d'une espèce nouvelle du genre Hyalonema, *H. lusitanicum* (P. Z. S. 1864, p. 265), je ne possédais qu'un seul spécimen de cette curieuse espèce. J'étais bien sûr que cet individu avait été réellement trouvé dans les mers du Portugal, mais je ne me dissimulais pas que pour faire partager complètement ma conviction à cet égard, il me faudrait obtenir d'autres spécimens.

J'ai donc redoublé d'instances auprès de mes correspondants à Setubal pour qu'on fît de nouvelles recherches, et mes efforts ont été couronnés d'un heureux résultat.

Aujourd'hui le Muséum de Lisbonne possède deux autres spécimens complets de *H. lusitanicum*, outre un grand nombre de filaments isolés, appartenant à 3 ou 4 individus. Tous ces objets m'ont été envoyés de Setubal dans des conditions telles qu'elles ne permettent pas le moindre doute quant à l'authenticité de leur provenance.

Des deux individus complets, l'un est à peine long de 47 centimètres, mais l'autre est un exemplaire magnifique, parfaitement conservé, et d'à peu près 80 centimètres. Le *corium polypigerum* de celui-ci recouvre complètement l'axis, sans aucune solution de continuité, depuis l'une de ses extrémités jusqu'aux $\frac{3}{5}$ de sa longueur.

J'ai reçu le premier individu en mai de 1864 de M. Gamitto, à qui je devais déjà le spécimen type de ma description ; l'autre m'est parvenu, ainsi qu'un gros paquet de filaments isolés, en Septembre de 1864 par un autre de mes correspondants de Setubal, M. Brito.

Maintenant j'espère que la nouvelle espèce de *Hyalonema* restera définitivement acquise à la faune du Portugal.

Elle ne me paraît pas d'une grande rareté dans nos mers. S'il n'est pas facile d'en obtenir autant d'exemplaires qu'on puisse désirer, c'est que nos pêcheurs, très-superstitieux comme ceux de tous les pays, croyent d'un mauvais présage pour leurs pêches la prise de ces produits singuliers, qu'ils connaissent fort bien et qu'ils appellent avec beaucoup de propriété *cravaches de la mer* (en portugais, *chicotes do mar*). Quand ils les trouvent dans les appareils dont ils se servent pour la pêche des squales, ils s'empressent à les rejeter à la mer, après les avoir mis en pièces.

Les zoologistes ne sont pas d'accord sur les véritable producteurs des filaments hyalins dont se compose l'axis des Hyalonemas. Quelques uns regardent comme tels les polypes, tandis que pour d'autres, en plus grand nombre, les polypes ne sont que des parasites,